

COC# 129

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

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420-9210 924-9290

(503) 906-9200

FAX 906-9210 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M106094

CLIENT: BRISTOL					ICE TO:									TURN	AROUND				ys*
REPORT TO: ANNE KRANA WET	REF	\leq		BRISTOL									10	Organi 5	ic & Inorgan		_		
ADDRESS: AMCHITKA ISUAND. PHONE: 907-770-0974 FAX: T	HK	· ·						STD. Petroleum Hydrocarbon Analyses											
PHONE: 907-770-0974 FAX: T	70.	097	15	P.O. N	UMBER	2: 2	109	10		· .		- '	-	5			2 1	1 -	
PROJECT NAME: AMCHITKA					REQ	UESTI	ED ANA	LYSES	3					STI	D,	Plea	se Specify	,	
PROJECT NUMBER: 9 1090		400													ОТНІ				
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1. OLAMB856SL 6/30/01 1410	X	X												5	2				
2. OLAMB8575L 6(30)01 1415	X	X						/						S	2				
3.01AMB858SL 6/30/01 1420	X	X												5	2				
4.01AM B859SL 6/30/01 1425	X	X												S	2				
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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/30/01 16:57. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

112

Work Orders included in this report:

M106094



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541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/02/01 14:20

Project Manager: Anne Kranawetter

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB856SL	M106094-01	Soil	06/30/01 14:10	06/30/01 16:57
01AMB857SL	M106094-02	Soil	06/30/01 14:15	06/30/01 16:57
01AMB858SL	M106094-03	Soil	06/30/01 14:20	06/30/01 16:57
01AMB859SL	M106094-04	Soil	06/30/01 14:25	06/30/01 16:57
01AMB860SL	M106094-05	Soil	06/30/01 14:30	06/30/01 16:57

COC #129

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/02/01 14:20

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB856SL (M106094-01) Soil					Sampled: 06/3	0/01 Rece	ived: 06/30/	01	
Diesel Range Organics	168	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107001	
Surr: 1-Chlorooctadecane	104 %	50-150							
Surr: Triacontane	73.1 %	50-150							
01AMB857SL (M106094-02) Soil					Sampled: 06/3	0/01 Rece	ived: 06/30/	01	
Diesel Range Organics	934	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107001	
Surr: 1-Chlorooctadecane	94.4 %	50-150							
Surr: Triacontane	132 %	50-150							
01AMB858SL (M106094-03) Soil					Sampled: 06/3	0/01 Rece	ived: 06/30/	01	
Diesel Range Organics	8590	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107001	
Surr: 1-Chlorooctadecane	72.7 %	50-150							
Surr: Triacontane	74.8 %	50-150							
01AMB859SL (M106094-04) Soil					Sampled: 06/3	0/01 Rece	ived: 06/30/	01	
Diesel Range Organics	1620	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107001	
Surr: 1-Chlorooctadecane	81.9 %	50-150							
Surr: Triacontane	131 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/02/01 14:20

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Project Manager: Anne Kranawetter

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB856SL (M106094-01) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0483	mg/kg dry	50	!1B BTEX/M	Π 06/30/01	06/30/01	0106107	
Toluene	ND	0.193	"	"	"	"	"	"	
Ethylbenzene	ND	0.193	"	"	"	"	"	"	
Xylenes (total)	ND	0.387	"	"	"	"	"	"	
Naphthalene	ND	1.93	"	"	"	"	"	"	
Surr: 4-BFB	76.5 %	50-150							
01AMB857SL (M106094-02) Soil					Sampled: 06.	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0406	mg/kg dry	50	!1B BTEX/M	П 06/30/01	06/30/01	0106107	
Toluene	ND	0.163	"	"	"	"	"	"	
Ethylbenzene	ND	0.163	"	"	"	"	"	"	
Xylenes (total)	ND	0.325	"	"	"	"	"	"	
Naphthalene	ND	1.63	"	"	"	"	"	"	
Surr: 4-BFB	71.7 %	50-150							
01AMB858SL (M106094-03) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0565	mg/kg dry	50	!1B BTEX/M	Π 06/30/01	06/30/01	0106107	
Toluene	ND	0.226	"	"	"	"	"	"	
Ethylbenzene	ND	0.226	"	"	"	"	"	"	
Xylenes (total)	ND	0.452	"	"	"	"	"	"	
Naphthalene	ND	2.26	"	"	"	"	"	"	
Surr: 4-BFB	78.1 %	50-150							
01AMB859SL (M106094-04) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0623	mg/kg dry	50	!1B BTEX/M	Π 06/30/01	06/30/01	0106107	
Toluene	ND	0.249	"	"	"	"	"	"	
Ethylbenzene	ND	0.249	"	"	"	"	"	"	
Xylenes (total)	ND	0.499	"	"	"	"	"	"	
Naphthalene	ND	2.49	"	"	"	"	"	"	
Surr: 4-BFB	92.8 %	50-150							

North Creek Analytical - Mobile Lab



Surr: 4-BFB

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

100 %

Reported:

07/02/01 14:20

BTEX,MTBE and Naphthalene per EPA Method 8021B

50-150

North Creek Analytical - Mobile Lab Reporting Analyte Result Limit Units Dilution Method Prepared Analyzed Batch Notes 01AMB860SL (M106094-05) Soil Sampled: 06/30/01 Received: 06/30/01 Benzene ND 50 !1B BTEX/MTI 06/30/01 06/30/01 0106107 $0.134 \, \text{mg/kg dry}$ Toluene ND 0.535 Ethylbenzene ND 0.535 Xylenes (total) ND 1.07 Naphthalene ND 5.35

Project Manager: Anne Kranawetter

North Creek Analytical - Mobile Lab



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

Reported:

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 07/02/01 14:20

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method Pre	epared	Analyzed	Batch	Notes
01AMB856SL (M106094-01) Soil				Sampled: 06/30/01	Recei	ved: 06/30/0)1	
% Solids	78.7	0.0100% by Weigh	t 1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB857SL (M106094-02) Soil				Sampled: 06/30/01	Recei	ved: 06/30/0)1	
% Solids	81.4	0.0100 % by Weigh	t 1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB858SL (M106094-03) Soil				Sampled: 06/30/01	Recei	ved: 06/30/0)1	
% Solids	83.8	0.0100 % by Weigh	t 1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB859SL (M106094-04) Soil				Sampled: 06/30/01	Recei	ved: 06/30/0)1	
% Solids	83.6	0.0100 % by Weigh	t 1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB860SL (M106094-05) Soil				Sampled: 06/30/01	Recei	ved: 06/30/0)1	
% Solids	100	0.0100 % by Weigh	t 1	Gravimetric 07/	01/01	07/02/01	0107009	

North Creek Analytical - Mobile Lab



%REC

425.420.9200 fax 425.420.9210

Source

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101

126

50-150

50-150

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/02/01 14:20

RPD

Anchorage, AK 99502-1116

Surr: 1-Chlorooctadecane

Surr: Triacontane

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Reporting

23.7

29.5

Analyte	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0107001 - 3545 ASE									
Blank (0107001-BLK1)			Prepare	ed & Analy	yzed: 07/0	1/01			
Diesel Range Organics	ND	150 mg/kg wet							
Surr: 1-Chlorooctadecane	23.5	"	23.4		100	50-150			
Surr: Triacontane	16.0	"	23.4		68.4	50-150			
LCS (0107001-BS1)			Prepare	ed & Analy	yzed: 07/0	1/01			
Diesel Range Organics	1050	150 mg/kg wet	1250		84.0	75-125			
Surr: 1-Chlorooctadecane	22.9	"	23.4		97.9	50-150			
Surr: Triacontane	27.8	"	23.4		119	50-150			
LCS Dup (0107001-BSD1)			Prepare	ed & Analy	yzed: 07/0	1/01			
Diesel Range Organics	1050	150 mg/kg wet	1250		84.0	75-125	0	20	

Matrix Spike (0107001-MS1)	ce: M106094-01	Prepare	d & Analy	zed: 07/0	01/01	
Diesel Range Organics	1840	150 mg/kg dry	1520	168	110	60-140
Surr: 1-Chlorooctadecane	27.8	"	28.6		97.2	50-150
Surr: Triacontane	20.3	"	28.6		71.0	50-150

23.4

23.4

North Creek Analytical - Mobile Lab

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Styl Will



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106

50-150

Bristol Environmental & Engineering

Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/02/01 14:20

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

2.64

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0106107 - MeOH I	Extraction
------------------------	------------

Surr: 4-BFB

Batch 0106107 - MeOH Extracti	ion						
Blank (0106107-BLK1)				Prepared &	Analyzed: 06/30	0/01	
Benzene	ND	0.0250 m	ıg/kg wet				
Toluene	ND	0.100	"				
Ethylbenzene	ND	0.100	"				
Xylenes (total)	ND	0.200	"				
Naphthalene	ND	1.00	"				
Surr: 4-BFB	2.45		"	2.50	98.0	50-150	
LCS (0106107-BS1)				Prepared &	Analyzed: 06/30	0/01	
Benzene	2.11	0.0250 m	ng/kg wet	2.50	84.4	69-138	
Toluene	2.28	0.100	"	2.50	91.2	53-151	
Ethylbenzene	2.55	0.100	"	2.50	102	61-141	
Xylenes (total)	7.23	0.200	"	7.50	96.4	62-141	
Naphthalene	2.96	1.00	"	2.50	118	65-135	

2.50

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 07/02/01 14:20

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from:
			\\sisters\elmnt\Report\M106094 FINAL 07 02 01
			1420.mdb
			Default Report (not modified)